

D9444

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2. (AMENDED) A system for mitigating ERGD events affecting the pitch and roll of a satellite in an inclined, elliptical earth orbit which comprises a plurality of infrared earth sensors for determining satellite roll and pitch connected to means for inhibiting at least one of said infrared earth sensors' scans while said scan passes over ERGD areas on the earth.
3. (NO CHANGE) A system for mitigating ERGD events affecting the pitch and roll of a satellite in an inclined, elliptical earth orbit which comprises a plurality of infrared earth sensors for determining satellite roll and pitch connected to means for using digital integrating rate assembly (DIRA) instead of said earth sensors for satellite roll and pitch determination while said scan passes over such areas.
4. (AMENDED) A method for mitigating disturbances in roll and pitch of an earth satellite in an inclined, elliptical orbit, said disturbances arising from ERGD events in earth areas that the satellite's ES scan traverses, said satellite including infrared earth sensors for satellite roll and pitch attitude control, comprising determining where said areas are located, and mitigating the effect of said ERGD events in said areas.
5. (NO CHANGE) The method of claim 4 further comprising mitigating said disturbances by yaw biasing said satellite and its ES sensors to avoid exposure of said ES sensors to said ERGD areas.
6. (NO CHANGE) The method of claim 4 further comprising mitigating said ERGD disturbances by inhibiting at least one scan of said ES sensors while said satellite's ES scan traverses said areas.



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**VERSION WITH MARKINGS TO SHOW CHANGES MADE****In the Claims**

1. (AMENDED) A system for mitigating ERGD events affecting the pitch and roll attitude of a satellite in an inclined, elliptical earth orbit which comprises a plurality of infrared earth sensors for determining satellite roll and pitch connected to means for yaw biasing said infrared earth sensors' earth scans away from ERGD areas on the earth.
2. (AMENDED) A system for mitigating ERGD events affecting the pitch and roll of a satellite in an inclined, elliptical earth orbit which comprises a plurality of infrared earth sensors for determining satellite roll and pitch connected to means for inhibiting at least one of said infrared earth sensors' scans while said scan passes over ERGD areas on the earth.
4. (AMENDED) A method for mitigating disturbances in roll and pitch of an earth satellite in an inclined, elliptical orbit, said disturbances arising from ERGD events in earth areas that [said] the satellite's ES scan traverses, said satellite including infrared earth sensors for satellite roll and pitch attitude control, comprising determining where said areas are located, and mitigating the effect of said ERGD events in said areas.



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